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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,344	11/25/2003	Alison J. McMillan	84714 3052 TAL	3908

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MANELLI DENISON & SELTER  
2000 M STREET NW SUITE 700  
WASHINGTON, DC 20036-3307

EXAMINER
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LIEW, ALEX KOK SOON

ART UNIT	PAPER NUMBER
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2624

MAIL DATE	DELIVERY MODE
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06/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/720,344	Applicant(s) MCMILLAN ET AL.	
	Examiner Alex Liew	Art Unit 2624	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claims 6, 14, 22 and 30 are objected to because of the following informalities:

With regards to claim 6, on lines 2 and 3, the term "fan blade containment analysis" is not clearly defined in the specification, shown on page 6 lines 23 – 26. With regards to claim 14, 22 and 30, see the rationale for claim 6. Further discussion and explanation of the term is required.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 – 3, 7, 9 – 11, 15, 17 – 19, 23, 25 – 27 and 32 are rejected under U.S.C. 102(e) as being anticipated by Atsumi (US pat no 6,801,665).

With regards to claim 1, Atsumi discloses a computer system programmed to process a large data set includes means for analyzing the data set and means for applying a data compression technique to the analyzed data set such that the compressed analyzed data set has high fidelity in regions of interest and has lower fidelity in regions of lesser

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interest (see figure 1 – 104 and 105 – the user may select region of interest which has more fidelity which are then compressed at 107 and 108).

With regards to claim 2, Atsumi discloses a computer system as claimed in claim 1, wherein data compression technique comprises the use of a wavelet compression technique (see figure 1 – 101).

With regards to claim 3, Atsumi discloses a computer system as claimed in claim 1, wherein the data compression technique produces a high fidelity in geometric regions of interest at points in time of interest (see figure 9 – where the geometric region of interest is a square).

With regards to claim 7, Atsumi discloses a computer system as claimed in claim 1, wherein means for analyzing the data set comprises a means for finite element analysis (see figure 9 – the region of interest has finite number of elements).

With regards to claims 9, 17 and 25, see the rationale and rejection for claim 1.

With regards to claims 10, 18 and 26, see the rationale and rejection for claim 2.

With regards to claims 11, 19 and 27, see the rationale and rejection for claim 3.

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With regards to claims 15, 23 and 32, see the rationale and rejection for claim 7.

3. Claims 5, 13, 21 and 30 are rejected U.S.C. 103(a) as being unpatentable over Atsumi ('665) as applied to claim 1 further in view of Ransford (US pat no 5,490,221).

With regards to claim 5, Atsumi discloses all the limitations discussed in claim 1, but does not disclose analyzing data set which are 4D as described on page 1 of the specification lines 12 – 15. Ransford discloses analyzing data set, which are 4D data set (see figure 2 – 20 and 22). One skilled in the ordinary art would include analyzing data set, which are 4D because to obtain greater details of the region of interest by including three dimensional data, to improve recognition of the region of interest in the image.

With regards to claims 13, 21 and 30, see the rationale and rejection for claim 5.

4. Claims 4, 6, 12, 14, 20, 22, 28 and 31 are rejected U.S.C. 103(a) as being unpatentable over Atsumi ('665) as applied to claim 1 further in view of official notice (MPEP 2144.03).

With regards to claim 4, Atsumi discloses all the limitations discussed in claim 1, but does not disclose geometric stress field within an image. However, it is well known in the art of edge detection and electronic inspection to find regions where a defect is

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present and providing an edge detector will detect the defects. A stress field within an image is a region in the image where it has a particular shape where an edge detector is able to detect it. One skilled in the ordinary art would include step of detecting defects because to find the shape and size of these regions to find the best compression ratio to compress the data where no desired data allowing the user to store more compressed data.

With regards to claim 6, see the rationale and rejection for claim 4. As discussed in the specification on page 6 lines 23 – 26, the term “fan blade containment” is not clearly described. The examiner interprets the term as an edge detection method to detect stress areas in an image, which is discussed in claim 4.

With regards to claims 12, 20 and 28, see the rationale and rejection for claim 4.

With regards to claims 14, 22 and 31, see the rationale and rejection for claim 6.

6. Claims 8, 16, 24 and 29 are rejected U.S.C. 103(a) as being unpatentable over Atsumi ('665) as applied to claim 1 further in view of Roman (US pub no 2002/0196848).

With regards to claim 8, Atsumi discloses all the limitation discussed in claim 1, but does not disclose including a local work station and a graphical display. Roman

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discloses a local workstation and a graphical display is produced at a local workstation (see figure 4A – shows a workstation with a graphical display). One skilled in the ordinary art would include a local workstation with a display because to allow the user to input compression parameters to perform proper image data compression.

With regards to claims 16 24 and 29, see the rationale and rejection for claim 8.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Liew whose telephone number is (571)272-8623.

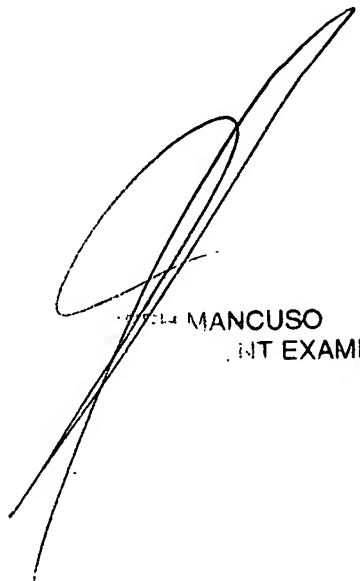
The examiner can normally be reached on 9:30AM - 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on (571)272-7695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**Alex Liew**  
**AU2624**  
**6/9/07**



MANCUSO  
INT EXAMINER